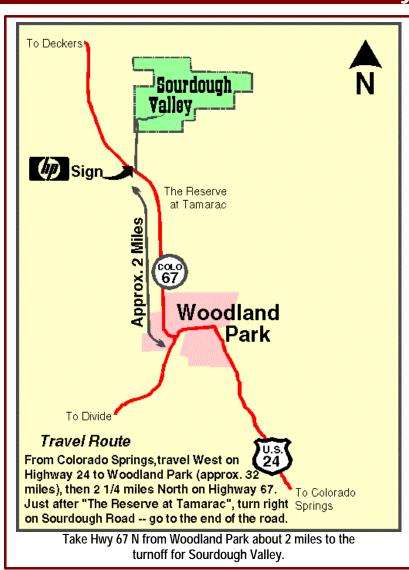






Vol. 52 June 2002 No. 6

# Field Day



Field Day is coming up at the end of this month. Mike KØTER will be doing a program on Field Day at the club meeting this month. For those of you that can't make the meeting, we're including the maps and directions to the Field Day site.

A majority of the club members again agreed that the mountains provide an excellent setting for the radio site, so we'll be at the same location as last year.

### June 22-23, 2002

Remember that it's always the fourth full weekend of each year, not necessarily the last weekend of the month. This year we'll be doing setup on Friday, June 21. Everyone is invited to come up Friday afternoon and help set up antennas, tents, trailers, and radio equipment.

Then camp if you can, and get ready to operate at noon on Saturday.

We should have an HF CW station, an HF SSB station, a VHF/UHF station, a satellite station, maybe a packet station, and a GOTA station (for Get-On-The-Air, not "Girl Scouts On The Air, which unfortunately shares the same acronym.)

We can always use some help for various things, such as cooking, locating and transporting equipment to the site, etc. Contact Mike KØTER to see what you can do to help out.

### What Is Field Day?

For those of you not familiar with Field Day, FD is basically an emergency preparedness affair, where clubs around the nation set up in a

primitive environment, usually free from power mains and sometimes civilization, and demonstrate a capability to operate for extended periods under stressed conditions. The ARRL hosts this event each year, and has turned it into a contest, with points scored for number of contacts made, and higher multipliers for stations using emergency power. It can also be quite the social event, with hams camping, barbecuing, sharing ham radio war stories, or showing off new equipment.

### **MEETING LOCATION CHANGE! SEE PAGE 12!**

June Program: Field Day by Mike Stansberry KØTER

Page 2 June 2002

Meetings Our monthly meetings are normally held on the 2nd Wednesday of each month at 7 pm at Mount Calvary Lutheran Church, 1318 N. Circle Drive, about 1/2 way between Platte Ave and Constitution Ave on N. Circle. Our Annual meeting is in October. Check the web site for any changes.

#### Regular License Exam Sessions

Our ARRL VEC test sessions are on the 2nd Saturday of even numbered months at 0900 at the Denver Technical College, 3245 International Cr, across from Memorial Park. Contact Erik KGØXE for details. Examinees need to bring (1) \$10, preferably a check or money order payable to ARRL/VE; (2) picture ID; (3) the signed original and a copy of your current amateur radio license and CSCEs you have (we keep the copies); and (4) a pen, pencil, and calculator if needed. Memory calculators will be checked.

**PPRAA Web Page** See it at http://www.qsl.net/ppraa/. Thanks to Lee Inman KØQED, our new webmaster.

Get on the PPRAA E-mail
Reflector Stay on top of new or short-fused developments. Send e-mail to majordomo@qth.net; within the body type "subscribe ppraanet". Thanks to John Wishart KCØJFH for maintaining this list.

**PPRAA Simplex Net** All amateurs are invited to join us on Thursday evenings at 1900 on 146.58 MHz simplex for our club net. Get the latest club and regional happenings!

	Officers	and	Directo	rs		
President	Rick Brown	KØSU	531-9423	k0su@arrl.net		
Vice-President	Kate Ellis	KCØEGJ				
*Secretary	Mike Allen	NØMIK	594-4896	n0mik@arrl.net		
*Treasurer	Ron Deutsch	NKØP	593-8352	nk0p@arrl.net		
Board Member	Bob Wogaman	KBØB	531-0511	kb0b@worldnet.att.net		
*Board Member	Jerry VerDuft	ADØA		verduftj@earthlink.net		
*Board Member	Tom McDaniel	NØNTX	570-1465	n0ntx@amsat.org		
Board Member	Aaron Pelouze	KD6FLM				
Past President	Sid White	K4ARM				
Ø-Beat Editor	Rob Roller	N7LV	282-0204	n7lv@amsat.org		
* Indicates this Director is completing the second year of a two-year term						

Comn	nittee Cha	irs &	Other	Contacts
Activity	Vacant			
Auditing	Kate Ellis	KCØEGJ		
Asset	Mike Stansberry	KØTER		
Historian	Roger Eslick	NØVR	272-9036	
Interference	Bill Petty	NØNJX	532-1439	
Membership	Les Borst	KCØNC	634-3995	
Programs	Rick Brown	KØSU	531-9423	k0su@arrl.net
Publicity	Rick Brown	KØSU	531-9423	k0su@arrl.net
Public Service	Mike Stansberry	KØTER		
Hamfest	Bob "Rails" Ryals	KIØGF	265-9950	rryals@pcisys.net
Technical Education	Linda Hedges	KBØRKW	683-7828	kb0rkw@juno.com
VE Testing	Erik Mugele	KGØXE		ve@teuton.org
Video Librarian	Rhoda Anderson	KB2BZY		wv7t@aol.com
AMSAT Coordinator	Tom McDaniel	NØNTX	570-1465	n0ntx@amsat.org
ARES EC	Wes Wilson	KØHBZ		
ARES Liaison	Mike Stansberry	KØTER		
ARRL Section Mgr	Jeff Ryan	KØRM	260-6826	k0rm@arrl.net
CCARC Liaison	Moe Pierce	WBØRTF		
RACES Officer	Tony Dal Lago	KC4VMB	575-8400	kc4vmb@arrl.net

## **Upcoming Club Programs**

Jun..... Field Day Jul..... TBD



The *Ø-Beat* is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc, P.O. Box 16521, Colorado Springs, CO 80935-6521. Permission is granted to reprint articles provided credit is given to both the author and the *Ø-Beat*. For membership and subscriptions see the back inside cover of this publication. Monthly advertising rates: Full page \$48; Half page \$24; Quarter page \$12; Business card \$6. Rates are billed quarterly. Send advertisements and payments to Pikes Peak Radio Amateur Association, Inc, P.O. Box 16521, Colorado Springs, CO 80935-6521.

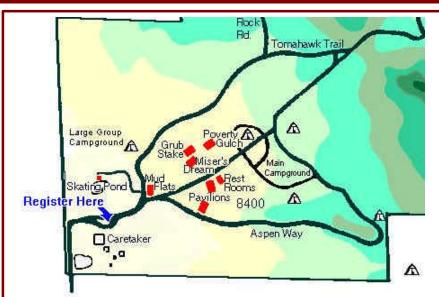
Articles for the Ø-Beat Deadline for articles or ads for the Jul issue is Jun 24. Submit articles by e-mail, US Mail, telephone or in person to the editor. Editor reserves right to edit for readability, grammar, spelling, punctuation and length.

Nonprofit Organization The PPRAA is a federal 501(c)(3) nonprofit organization and welcomes all contributions. Your contributions/donations may be tax-deductible.

**<u>Ø-Beat Available Electronically</u>** in PDF form via e-mail and on the web. Contact the editor for details.

### **Club and Local News**

Note that Agilent Technologies is graciously hosting us again this year. Mike Stansberry, being an Agilent employee, has access to this private campground for his family and guests. The PPRAA is a guest of Mike, and Mike is shouldering the responsibility for us. Mike has asked us to keep to the assigned Field Day site, with the exception of using the facilities in the "Rest Rooms", also shown on this map. Finally, due to the extreme fire danger, and per the fire restrictions in effect, there will be no open fires, and no smoking allowed except in enclosed vehicles, like campers or automobiles. We'll be bound by the Stage II restrictions in effect for the entire Pikes National Forest.



Once inside the Sourdough Valley site, take the first left after the entrance shack, and the Field Day site will be roughly at the "Large Group Campground" identified on this map.

#### Club Picnic Coming Up de N7LV Rob Roller

Each year, per the bylaws, we hold our annual picnic in the summer. This year we'll be holding our picnic on August 25 at the Air Force Academy again. Rick KØSU has made arrangements to reserve one of the family camping areas just east of the stadium. We'll need someone to coordinate this event, buy the food, organize cooks, etc. So if you're so inclined to help with this, we can use you. More on the picnic in next month's Ø-Beat.

#### **14'er Event Coming Up** de KØNR Bob Wite

Just a reminder that the signup system for the Colorado 14er Event is on yahoo groups at http://groups.yahoo.com/group/ham14er/database

We are using the Yahoo groups "database" feature to keep track of where people plan to operate. Multiple people can sign up for the same peak ... but I'd recommend you either coordinate your operation with the other people on the same summit or find another summit. Two operators trying to use the same band at the same time on the same peak pretty much guarantees that you will interfere with each other. If you don't have web access or just need help getting signed up, ask someone else to post your intentions. I am happy to assist with this ... just send me an email.



#### Whale Oreos

It's a fact of life in the food chain. Whales eat penguins. Per NH6ON's Antarctica presentation, the folks at the South Pole have a cute little nickname for these birds. BTW, Nick's presentation was excellent! (Apologies to penguin lovers.)

**Corrections** ... de N7LV Rob Roller

In last month's issue WBØTAQ did not write the "Local 10-10 Chapter Starts Up" article. I did. My apologies to WBØTAQ; sorry for any confusion.

Page 4 June 2002

## Public Service & Emergency Communications

The PPRAA is an ARRL Special Services Club, but it is not an emergency services club itself. The PPRAA supports all amateur radio involvement in public service and emergency communications in any way it can, including reporting activities happening in the region. These columns are based on available knowledge of the editor, and the opinions expressed are not necessarily the opinions of RACES, ARES, Skywarn or any other organization, or their leadership. Logos used with permission.

### RACES





http://www.gsl.net/epcraces/

VHF Net Tuesdays at 1930 on 146.76 MHz CMRG repeater Tony Dal Lago KC4VMB, RACES Officer

There is a new roster dated May 2002. Please check it and make sure your information is correct. Last month's training was on fire weather. How appropriate, considering the conditions across the state. A fire trainer gave us a refresher course on how to use the belt weather kit. If you missed the training, you can find the training on the web at www.bouldermountainfire.org/training/weather/page1.html Members also manned the sheriff's command post vehicle during the city's emergency preparedness fair.



http://www.qsl.net/ppares/

VHF Net Tuesdays at 1900 on 146.97 MHz PPFMA repeater Wes Wilson KØHBZ, EC

ARES was busy in May with the Cavalier Trail Ride PSE, with emergency support for the Schoonover Gulch Fire near Deckers, and with a table at the city's emergency preparedness fair. Thanks to all that helped out with everything! An after-action report should be available shortly for each event, posted to the Colorado ARES web site http://www.qsl.net/aresco The trail ride was the first use of a portable repeater built by KØHBZ. There'll be photos next month of the repeater.

# Fire Season Just Beginning

Even though the firefighters perform the most demanding and most dangerous work, hams do provide valuable assistance during these fires. EPCRACES members, in support of county operations, are trained to take fire weather readings from locations very near the fire. Readings include wind direction, speed, temperature and relative humidity, and are taken with the weather belt kit. Some hams have purchased the Kestrel 3000 or similar model, but many firefighters do not use them. Despite their convenience, firefighters haven't been completely satisfied that they give reliable and accurate readings. PPARES members may provide auxiliary comm for fire depts if phones go out, or may provide amateur television coverage or other comm, depending on the agency served. In the Schoonover fire, PPARES provided comm for the Red Cross shelter in Woodland Park. Other ARES and RACES districts in CO have members that are red-card certified (wildland firefighter certification). There may be some individuals in El Paso or Teller counties that have red cards, but neither PPARES or EPCRACES has such a formal program to train hams for red-card certification.



A large cloud of smoke billows high above the Front Range on May 23 as winds kick up the Schoonover Gulch Fire near Deckers, as seen from Briargate. Several of our club members assisted with comm support during this fire.

(Photos by N7LV)

### **Articles**

# **Lightning Doesn't Have to be An Enemy...** *de N7LV Rob Roller*

[I started an article on lightning last year in July, near the end of the severe weather season, but never finished it. Consider this the remainder of that article. Some of it is reprinted from the first article.]

**Lightning** (lît ning) *n*. The flash of light that accompanies a high-tension natural electric discharge in the atmosphere. (from Webster's II New Riverside Dictionary)

Not too scary sounding. Until you hear the thunder when it hits close by. "Head for the hills ... But unplug the radios first!!"

I'm not going out on a limb and saying that lightning can be your friend, either! But let's think about this for a second or two. Here we are, amateur radio operators. We are the communications experts that OEMs rely on in emergencies! Rain or shine, sleet or snow. No, wait a minute ... that's the post office. But seriously, we'll run for cover when thunderstorms loom, unhook our coax, hide our radios from the sight of those ominous clouds. Then we proceed to turn on our weakest piece of equipment, an HT, and feebly attempt to check in to ... what else? ... the severe weather net! We'll use an HT from the basement (where we can't be heard by the

repeater). Sound a little inconsistent? Two things: here we are hiding our radios from the storm, yet the severe weather spotters need those radios to participate in the net. Also, here we are hiding our radios, yet we rely on other radios (repeaters) which are in much more *EXTREME* lightning danger than we're in, sitting atop some of the tallest mountain peaks around. What gives? Why are we so afraid of losing our equipment, but repeater operators (and actually, hundreds of other commercial and public safety equipment operators) continue to operate like nothing's going on? Oh yes, the Sheriff's Office sends technicians out to unplug their dispatch radios when lightning is near. *NOT!* What do they know that we don't? Or maybe they just have a bigger insurance policy than we do.

Well, I'm here to say that with careful planning, it doesn't have to be that way!

### What is lightning?

Lightning has been the study of many research institutes, engineering firms and scientists. Each one has a different definition of lightning. But all agree that lightning is simply a very high current electrical discharge between the clouds and the ground. Many of them state that you can protect your home from lightning, but there are a disclaimer or two that nothing will prevent a direct lightning hit from damaging your

station.

### Why protect your station?

Colorado and Florida are probably the top two states in the amount of lightning strikes each year.
Colorado will have hundreds of thunderstorms by the end of this summer. The odds are that eventually, you will be the target of, or perhaps you'll experience some collateral damage from, a lightning strike. You've invested thousands of dollars in your equipment. Plus, lightning can also cause damage to other parts of your home, as well as the possibility of structure fire.

#### How to protect?

With thousands invested in radio equipment it should be no big deal to invest a few more bucks in some lightning protection. On one end of the scale, you could go all out and install a complete lightning rod



Pikes Peak Radio Amateur Association

Page 6 June 2002

system, with spikes along your roof, to collect the lightning, and thick gauge wire to channel the bolt to the ground system, which is ideally designed to dissipate the charge into the ground. If you can keep the charge from getting inside your home or the antenna, you stand the best chance to keep your equipment operating. Polyphaser recommends a single, low impedence ground system for all towers, masts, antennas, power, phone, rotor, etc. Inside your shack you should have a single point ground connector which connects to an outside system capable of dispersing the charge.

The secret to protecting your equipment is to control the electrical path, directing the current to ground. Ideally you want to keep the current from passing through what normally is the non-conducting portions of your house (the wood frame, etc), and keep it along a metal path to ground. Because lightning is so powerful and so unpredictable, that may be difficult to do.



It's not very clear from this photograph, but Steve has a ground wire running from the antenna base down to a 12-ft copper pipe driven into his yard.

For towers, the ARRL recommends that each leg of the tower be grounded to its own ground rod, at least 8 ft in length. Use no smaller than #6 AWG copper wire. Don't use solder, but use mechanical connectors and fittings designed for grounding applications. You should avoid using a non-conductive material for a tower, such as a wooden telephone pole. The reason for this is because without a good conductor to ground the lightning is going to use the antenna and coax for its path to ground, rather than the metal path supplied by a tower. Result: lightning comes in on the coax and blows your equipment, instead of going to ground through the tower.

Ground your coax outside your home with some kind of in-line arrestor and grounding device. Polyphaser is one of the biggest manufacturers of lightning Lightning rods, coaxial lightning suppressors, electrical and phone surge protectors, grounding systems. The portable repeater owned by Derek Toeppen WAØZTI and used by ARES or RACES incorporates a coaxial arrestor. Derek demands that this protection be set up each time the repeater is deployed to protect his equipment.

Steve Bates NØMHQ has grounded his antenna directly to a 12-ft copper pipe, offering a low impedance path for the lightning in case of a strike.

Steve's system consists of an AR-270 dual-band antenna with #4 copper wire running to a twelve foot piece of 3/4 inch diameter copper tube buried with about two and a half pounds of copper chloride washed down the tube. Steve Schaarschmidt KØCI brought over his ground resistance equipment to see how it compares to average. The ground was improved enough so that Steve has half the resistance as average ground.

Wayne Kimmel KA9SIM showed Steve how to use water and a garden hose to bury the copper pipe. The water pressure helped him drive the 12-ft pipe completely into the ground in only a few minutes. Wayne also recommended he add copper chloride to improve the ground conductivity.

Suffice it to say that there is much that can be said about protecting your equipment and your home from lightning. Much more than can be put in a single article in the *Q-Beat*. And like I mentioned at the beginning, I'm no lightning expert, so nothing I've written here is intended to guarantee you'll be free from station destruction. I used a number of sources for some of this information, including the ARRL's Technical Information Service (www.arrl.org/tis/info/lightning.html) and the Polyphaser Corporation's frequently asked questions page at www.polyphaser.com. This latter source is an excellent place to get general and specific information, as well as products for your station. I suggest that if you want to

know about lightning, visit these web sites and read up on it. Read as much as you can, then design your own system to protect your equipment.

### **Colorado Connection News**

de WBØQMR Paul Shackelford

05/15/02

We were very pleased to host the Colorado Council Of Amateur Radio Clubs semiannual meeting in Silverthorne this month. We had a great turnout and many important issues were discussed and some resolved. Thanks to all who attended.

We'll have a table at the Pikes Peak R.A.A. Megafest on June 1<sup>st</sup> at Lewis Palmer High School near the Monument exit on south I-25. There will be some board

members there as well as some of our primary technicians, answering questions and take suggestions to make your Connection better. Please stop by and chat and also take a look at some of the goodies we have for sale for a tax deductible donation to The Connection.

The Grand Junction repeater is experiencing some intermittent linking problems and should be repaired soon if the road is open and snow free.

We are hoping to start the final phase of the Durango link within 30 days. Your help with that project would be greatly appreciated.

If you know of any problems with our system please notify us at our email address of kb0cjj@colcon.org or catch us on our Thursday night net on any Connection repeater at 8:00pm.

### Club Business

#### **Board Meeting Minutes** de NØMIK Mike Allen, Secretary



The May 13, 2002 PPRAA Board of Directors (BOD) meeting was called to order at 7:00 PM by President Rick Brown, KØSU at the home of Mike Allen NØMIK. Other board members

present were Rob N7LV, Bob KBØB, Aaron KD6FLM, Kate KCØEGJ, and Jerry ADØA. Mike WV7T served as proxy for Ron NKØP, Moe WBØRTF was a proxy for Tom NØNTX, and Bill KDØJU was a proxy for Sid K4ARM. Rhoda KB2BZY attended as a guest. Rick began with a few announcements. First was that the Activity committee chairmanship was vacant and that a new chairman was needed. The next Board of Directors meeting will be held at Rick's house, and the program for June will be Mike KØTER covering our preparations for Field Day. Business began with a discussion of a new meeting site. The board recommended meeting at the city OEM site for two months, and then voting on its acceptability. The next time of business covered the club picnic. A chairman is needed to oversee picnic preparations. Dates for the picnic were discussed with August 25<sup>th</sup> the most likely candidate. Jerry ADØA suggested the picnic be held on a Saturday to accommodate those who are involved in church activities on Sundays. Rick will submit an e-mail poll to the membership regarding holding the picnic on Saturday or Sunday. He will also try to schedule the picnic area at the Air Force Academy that we've used in the past. Next, Rick told us he'd received a letter from Cheyenne Mountain High School thanking us for the equipment we'd donated from the estate of George Farina KBØEXX (SK). The MFJ code machine purchased last month has been marked as club property and is now part of the inventory. Mike WV7T has put his Boy Scout radio presentation on hold pending an open date. The prizes for the Swapfest to be donated by the CMRG are a Yaesu VX-1R, a VX-5R, and 4 CMRG memberships. We'll draw for them at the end of the Swapfest and be addressed by CMRG president Dave Novotny WA6IFI. Swapfest money

taken for entrance fees, extra raffle tickets, and vendor tables needs to be kept separate. Another PO box key is needed. Mike NØMIK will research a letter written by Sid K4ARM last year to the Post Office requesting a second key. The next topic was the issue of public service and how to get back into supporting more of them. If anyone has any ideas, please bring them to the BOD. Under Publicity, Rick noted that Roger KE6ZOT is working to establish contacts in the local media. Field Day was covered next. Due to the season's fire danger, a back up site is needed. Rick will be setting up the VHF/UHF station. He has the radios and antenna, but needs a power source. Going around the room, Mike WV7T began by announcing that a Canadian Navy Lt Commander was moving to the Springs. Rhoda KB2BZY noted she was missing one coffee maker and two glass pots. They had been stored at the church during the time we met at the Leo Young Service Center in March and April. Rick said he would call the church office regarding the missing items. Jerry ADØA noted he was working with Rick on getting exhibitors for the 2003 convention, but that they were meeting resistance from some vendors. Jerry will be discussing prizes at the next general meeting and soliciting ideas. Wes KØHBZ is coordinating the special event station as well as the VE sessions. Rick noted his new e-mail address is now k0su@adelphia.net. The meeting adjourned at 8:51 PM. de Mike Allen NØMIK, Secretary

### Membership Report

de KCØNC Les Borst, Membership Chairman

#### Please welcome these New Members

EL PASO COUNTY RACES......KC0MWQ
FRED LANYON....WB0OTP
MICHAEL THOMPSON....KC0GLR

Total Number of Members

176

Page 8 June 2002

#### General Meeting Minutes de NØMIK Mike Allen, Secretary

President Rick Brown KØSU called the meeting to order at 7:00 PM. 39 members and guests were in attendance. After introductions, a motion to accept the minutes of the last meeting was made and passed unanimously. The Treasurer's report, given by Ron Deutch NKØP reflected April's income of \$107.00, expenditures of \$335.00, which leaves a balance of \$2,963.92 in the club's checking account. Committee reports began with Mike KØTER reporting that the new MFJ code machine was now part of the inventory. Membership was covered by Rick for Les KCØNC. Rick had received a check from the El Paso Board of County Commissioners for one year's membership! Rick also noted that the Gazette had received an open invitation from Publicity chairman Roger KE6ZOT to cover our meetings and activities. Rob N7LV reported on the Pikes Peak International Hill Climb support, noting he still needed about 20 more volunteers. Contact Rob in you're interested. Swapfest honcho Bob KIØGF reported that vendors will not be allowed into the Swapfest site on Friday. The tables however, may be set up Friday. Bob passed around volunteer sign-up sheets for the remaining tasks associated with setting up and cleaning up after Swapfest. Tom NØNTX is taking orders for Field Day t-shirts and pins. T-shirts come in sizes M-XXL and are \$12.95 + \$0.68 shipping and handling. ARES Liaison Wes KØHBZ mentioned the Search and Rescue missions covered so far this year as well as the Cavalier Trail Ride to be held Memorial Day weekend. Aaron KD6FLM will be the mission coordinator for that event. Wes also noted that he had applied for special event call sign W1AW/Ø for the 2003 division convention. Moe WBØRTF reported on the CCARC meeting in Silverthorne on April 27<sup>th</sup>. The new CCARC chairman is George KØGS, and the new frequency coordinator is Doug K2AD. RACES Liaison Les KCØNC reviewed the weather support they had provided to personnel fighting the fire in Black Forest last Tuesday morning. Convention chairman Jerry ADØA announced the convention would be held at the Estes Park Convention Center from May 30 to June 2, 2003. There will be swapfest tables. Registration for the convention begins sometime in August. Announcements began with Moe WBØRTF stating that the Lunch Bunch would be meeting at the Hometown Buffet in the Mall of the Bluffs, on the corner of Academy and Austin Bluffs. Mike WV7T announced his plans to operate a special event station for Armed Forces Day on May 18<sup>th</sup>. Mike KØTER brought up the only item of old business when he covered Field Day. Craig KAØCT was announced as the new SSB coordinator. Next, discussion was held on the possibility of holding Field Day at an alternate site due to the dry weather and the extreme fire danger. Many sites were mentioned including Memorial Park, Coronado High School, and Fountain Regional Park. Mike said he'd know more next month about the HP site already chosen. Les KCØNC said the SSB tower was missing a guy wire and that it would cost about \$10 to replace it. Jeff KØRM made a motion to allocate up to \$150 for guy line replacement. The motion was seconded by Rob N7LV and passed unanimously. Rick KØSU brought up the one item of new business. A new meeting place is needed soon. To begin

surveying new meeting places, the next meeting will take place at the Colorado Springs Office of Emergency Management on 305 S. Union in the auditorium. The auditorium is handicapped accessible and has a coffee area, however, drinks are not allowed in the auditorium. Rick KØSU presented the Hammy to Ryan KCØGLQ. Rachel KCØMAA was last month's recipient, but could not be at the meeting to make the presentation. Jeff KØRM presented a QST Cover plaque to Nick NH6ON for his article on hamming in Antarctica. After the break and door prize drawing, Nick presented a very interesting talk on his ham experiences in Antarctica. The meeting adjourned at 9:10 PM. de NØMIK, Mike Allen, Secretary

#### Worthwhile Notes from the ARRL

#### ARLB028 FCC proposes two new amateur bands!

Good news for ham radio this week! FCC has proposed going along with ARRL's request for a new domestic (USonly), secondary HF allocation at 5.25 to 5.4 MHz. The FCC also is ready to permit operation on a 136-kHz "sliver band" in the low-frequency (LF) region. And, in response to a third ARRL request, the FCC has proposed elevating Amateur Radio to primary status at 2400 to 2402 MHz.

"I'm just as tickled as I can be," ARRL President Jim Haynie, W5JBP, said upon hearing the news. "This is a classic example of our ARRL at work."

The FCC voted unanimously May 2 to adopt the Notice of Proposed Rulemaking in ET Docket 02-98. The Commission released a Public Notice May 9, and the NPRM is expected to be released soon. A comment deadline will be announced as soon as it's available.

The FCC said the new 5-MHz band would help amateurs "better match their choice of frequency to existing propagation conditions." The band, if approved, would be the first new amateur HF allocation since World Administrative Radio Conference 1979 gave amateurs 30, 17 and 12 meters--the so-called "WARC Bands." Assuming the 5-MHz band eventually is authorized, it could be a few years before it actually becomes available.

The League said its successful WA2XSY experiments demonstrated that amateurs can coexist with current users and that the band is very suitable for US-to-Caribbean paths. In comparisons with 80 and 40 meters, the WA2XSY operation also showed the 60-meter band to be the most reliable of the three. The ARRL also argued that a new 150-kHz allocation at 5 MHz could relieve periodic overcrowding on 80 and 40.

If allocated to amateurs on a secondary basis, hams would have to avoid interfering with--and accept interference from—current occupants of the spectrum, as they already do on 30 meters. The band 5.250 to 5.450 MHz now is allocated to Fixed and Mobile services on a co-primary basis in all three ITU regions.

The ARRL asked the FCC for two LF allocations in October 1998--135.7 to 137.8 kHz and 160 to 190 kHz. The FCC said its action on one part of that LF request proposes changes that would enhance the ability of amateur radio operators to conduct technical experiments, including propagation and antenna design experiments, in the 'low frequency' (LF) range of the radio spectrum."

Several countries in Europe and elsewhere already have 136-kHz amateur allocations. The first amateur transatlantic contact on the band was recorded in February 2001.

Hams would be secondary to the Fixed and Maritime Mobile services in the 136-kHz allocation. The League said its engineering surveys suggest that hams could operate without causing problems to power line carrier (PLC) systems already active in that vicinity or to government assignments. Unallocated Part 15 PLC systems are used by electric utilities to send control signals, data and voice.

The FCC said its proposal to upgrade the Amateur Service allocation at 2400 to 2402 MHz to primary "seeks to protect current amateur use of this band." Hams have shared their other 2.4 GHz spectrum on a secondary basis with government users.

Amateurs already are primary at 2390 to 2400 and from 2402 to 2417 MHz. The ARRL has said primary status in the intervening spectrum slice was needed "to provide some assurances of future occupancy of the band segments for the next generation of amateur satellites."

The ARRL has expressed its belief that hams can continue to accommodate Part 15 and Part 18 devices at 2.4 GHz.

# ARLB029 Landmark bill could provide amateurs relief from restrictive covenants

A bill introduced in Congress May 14 could provide relief to amateurs prevented by private deed covenants, conditions and restrictions--CC&Rs--from installing outdoor antennas. Rep Steve Israel (D-NY) has introduced the "Amateur Radio Emergency Communications Consistency Act." The measure is aimed at preventing private land-use rules from "unreasonably interfering with" the installation and use of "appropriate antenna structures" for amateurs. Rep Greg Walden, WB7OCE (R-OR)--the only Amateur Radio operator in Congress--and Rep Pete Sessions (R-TX) have signed on as original cosponsors.

The measure contains but one sentence: "For purposes of the Federal Communications Commission's

regulation relating to station antenna structures in the Amateur Radio Service (47 CFR 97.15), any private land use rules applicable to such structures shall be treated as a state or local regulation and shall be subject to the same requirements and limitations as a state or local regulation."

The bill, which does not yet have a number, is expected to be assigned to the Telecommunications and Internet Subcommittee of the House Energy and Commerce Committee.

After the ARRL ran into a brick wall trying to convince the FCC to include CC&Rs under the limited federal preemption known as PRB-1, the League's Board of Directors agreed to pursue a congressional remedy. ARRL President Jim Haynie, W5JBP, and other League officials met with Israel, Walden, Sessions and others on Capitol Hill earlier this year to discuss the prospect of such a bill and how it should be worded. With the proposal now in the legislative hopper, Haynie says the "really hard work" is up to the amateur community, League members or not.

"It becomes important for all of us to write your congressman, call your congressman and voice your support," Haynie said. "This will have to be a grassroots effort, and we're going to pull out all the stops."

Israel, whose father, Howard, is K2JCC, said in a statement read into the Congressional Record that his bill seeks to ensure the continued viability of a volunteer public service resource. "My bill would provide Amateur Radio licensees with the ability to negotiate reasonable accommodation provisions with homeowners' associations," Israel said, "just as they do now with governmental land-use regulators, to ensure that our nation is not left with areas devoid of the public safety services amateurs can provide."

Visit the US House of Representatives "Write Your Representative Service" Web page <a href="http://www.house.gov/writerep/">http://www.house.gov/writerep/</a> for information on how to contact your representative.

ARRL requests those contacting members of Congress to copy ARRL on their correspondence--via e-mail to <a href="mailto:ccr-bill@arrl.org">ccr-bill@arrl.org</a> or via US Mail to CC&R Bill, ARRL, 225 Main St, Newington, CT 06111. Please include your name and address on all correspondence.

Page 10 June 2002

### Miley's Radio

719 West 7<sup>th</sup> Street, Florence, CO 81226 (719) 784-3040 Since 1974

AEA MM3A, Morse machine, keyer, tutor \$100

ALINCO M06T, 6m FM, w/ tone \$100

ASTRON RS35A, P/S, very little use \$100

ASTRON RS35M, w/meter, used @220 VAC \$120

**BUTTERNUT** HF5B, HF Beam, 10, 12, 15, 17 & 20m, new in box

BUTTERNUT HF6VX, 80-10m vertical, good cond \$175

DENTRON MT2000A Tuner, 1KW RF \$100

**HEATH** HW101, HP23 PS, new finals and relay driver,

completely aligned to factory specs \$250 firm

ICOM PS55, 20 amp power supply \$125 ICOM 211, 2m, all mode, base unit \$275

ICOM 730, 80-10m, WARC not gen cov \$350

ICOM 735, 160-10m, WARC gen cov, with hand mic, electronic

keyer, mounting bracket \$550; w/o keyer & mb \$500

**ICOM** 745, new in box \$450

ICOM 745, w/ int PS, loaded with filters and TCXO \$500

**ICOM** 2340H, 2/70 (only works on 70cm), mobile \$100

**KENWOOD** AT250, auto tuner \$200 & 1@\$175

**KENWOOD** TR9130, 2m, all mode mobile, TTM, enc box \$200, w/o tone \$150

KENWOOD TS140S, WARC gen cov \$465

**KENWOOD** TS430S, WARC gen cov, w/MB, hand mic, manual, pow cord, exc cond in box \$485

**KENWOOD** TS520 & 520S, not dig, not gc, \$350 & \$325

KENWOOD TS530S, digital, WARC, not gen cov, base unit,

excellent, similar to TS830S \$475

KENWOOD TS570D, HF & 6m, very little use \$750

KENWOOD TW4000A, 2/70m dual band mobile, no tone \$100

MFJ 259B SWR analyzer, VHF, new \$230

MFJ 269, SWR analyzer, HF-470mhz, new \$310

**MFJ** 462B, all mode multi reader, CW, RTTY, ASCII, AMTOR, will hook to printer \$90, new was \$170

MFJ 9406X, 6m SSB, new \$240, CW adapter, new \$35

MICROCOM AX9624C, PK232 MBX-5.5 PACTOR upg chips, disks & s/w \$120

**MIRAGE** A1015G, 6m amp, preamp, 10/150w, like new \$250, new was \$350

MIRAGE B3016G, 30-50 in, 160 out, used \$175, new was \$300

MIRAGE D1010N, 440 amp, 10/100w \$225, new was \$360

**RANGER** 2950, 10,12m AM/FM/CW/SSB, 25w PEP, w/ tone for 10m repeaters, new \$245

RANGER 5054DX, 6m all mode, 10w AM/FM/CW, 25w SSB, new, only one on hand \$295

YAESU FT-2400H, w/ tone, 50w \$100

YAESU FT-101E, xcvr with hand mic, good cond, new finals & driver tubes \$350, also EE \$300

YAESU FT-101ZD, digital, great cond \$400

YAESU FT-102, digital, am/fm, WARC, excellent cond \$550

YAESU FT-109RH, 220 Mhz HT, 4w \$100, w/ tone encoder installed \$150

YAESU FT-7B, 80-10m, AM/CW/SSB HF mobile \$250

YAESU FTV707, Transverter, 6m module installed, for FT707-901-902 \$150

Complete line of ARRL Books, ASTRON & MFJ switching and transformer power supplies MIRAGE AMPs, and MFJ Tuners and Accessories at competitive prices

GOOD STOCK OF NEW AND USED 2M & DUAL BAND RIGS, HF/VHF/UHF ACCESSORIES, BATTERIES & ANTENNAS

Rotor cable, antenna wire, standard & silky, RG58AU, 8X, 8U, 213U, 9913 coax 1 ft. to 500 ft. Insulators, baluns and antenna accessories. Now stocking 50ft telescopic masts \$105

#### LOWER OVERHEAD...LOWER PRICES...ALL BRANDS OF NEW

LOTS OF USED & CONSIGNMENT HAM EQUIPMENT, CONSIGNMENT FEE 10% WE BUY USED HAM EQUIPMENT, WE TAKE TRADE-INS & GIVE YOU TOP PRICES

All used gear carries a 30 day money back guarantee! At 90 days, 90% trade back!

STORE HOURS: TUESDAY - FRIDAY 9 - 5 SATURDAY 9 - 1 evenings 6 - 8 by appointment only, closed Sun & Mon

### Will be at the PPRAA MegaFest, in Colorado Springs, on June 1<sup>st</sup>

We also repair ALL brands of Ham Equipment Shop rate \$35/hr for Hams only, Commercial rates higher June 2002

### MURS Radio Service Defined

de N7LV Rob Roller

For those of you that take interest in other radio services, especially the ones that don't require licenses so you can talk to your unlicensed friends, the FCC has finally come up with a definitive set of rules for its relatively new Multi-User Radio Service. This service actually was born about a year ago, but was without many specific rules. Here are some of the basics for this unlicensed service:

Detachable antennas allowed, antenna heights 20 ft above building, or 60 ft off of ground, whichever is higher, 2 watt output maximum, frequencies of 154.570 MHz, 154.600 MHz, 151.820 MHz, 151.880 MHz, and 151.940 MHz, radios must be type accepted.

Essentially this service was created because there were so many unlicensed users buying cheap radios and operating them without a license that the FCC just gave up and has turned these frequencies over to just about anyone that wants to use them. Monitor, and see what you hear!

# Pikes Peak Region Ham Radio Event Calendar

_	June / July 2002 Please see Page 2 for Points of Contact						
Sunday Monday		Tuesday	Wednesday	Thursday	Friday	Saturday	
						1 PPRAA Hamfest	
2	3	4	5	6	7	8 PPRAA VE Testing RMD Convention Mtg	
9 PSE Garden of the Gods 10K Run	10	11	12 PPRAA Mtg	13	14 Lunch Bunch Flag Day	15	
16	17 Board Mtg	18	19 MARC Mtg	20 RACES Mrg	21 Field Day Setup	22 Field Day!	
23 Field Day! PSE Starlight Spectacular	24 ZB Deadline	25	26	27	28	29 PSE PP Hill Climb	
30	1	2	3		5	6 MARC VE Test	
7 PSE Summer Trail Roundup	8	9	10 PPRAA Mtg	11	12 Lunch Bunch	13 RMD Convention Mtg	
14	15 Board Mtg	16	17 MARC Mtg	18 RACES Mtg	19	20	
21	22	23	24	25	26	27 PSE Poker Run	
28	29 ZB Deadline	30	31				

Questions about any event on this calendar? Something missing? Try our web page, or contact a Board Member!

Membership Application for the Pikes Peak Radio Amateur Association, Inc. P.O. Box 16521, Colorado Springs, CO 80935-6521							
Date:	☐ New Member ☐ Renewal like to participate?		would you				
Name:				Field Day	⇒□		
A 11				Demonstrations Nets or round tables	⇒□ ⇒□		
City:	State:	Zip: _		Organize activities Teach ham classes	⇒□ ⇒□		
	Class: N T + G A E			Full Member Family Membership	\$15: ⇒□ \$18: ⇒□		
Mbr of ARRL? □ Yes	□ No E-mail:			Over 65 Over 65 Family	\$10: ⇒□ \$12: ⇒□		
Additional Family Memb			Associate Ø-Beat Only	\$12: ⇒□ \$12: ⇒□			
Name:	Call:	_Class:	ARRL?	Donation to Club:	\$		
Name:	Call:	_Class:	ARRL?	Total Enclosed:			
Name:	Call:	_Class:	ARRL?	MAKE ALL CHECKS PAYABLE TO "PPRAA"			
Please indicate how you'd like your Ø-Beat delivered: (Defaults to standard hard copy in the event that NO check boxes are checked)		☐ As a PDF file attachment via e-mail, to help save a few bucks					
Circle your interests $\Rightarrow$ HF / V/UHF / FM / SSB / Digital / DX / Contests / Technical / Hardware / Other							
New and renewing members must submit a completed application form along with your check to the Treasurer.  Please Type or Print Clearly!							

ALL NEW MEMBERSHIPS AND RENEWALS WILL BE PRORATED TO EXPIRE IN DECEMBER!!

Page 12 June 2002

## RadioActivities!

**Lunch Bunch** 



The next Lunch Bunch is June 14 at Country Buffet in the Shops of the Bluff, Academy & Austin Bluffs Pkwy, 1130-1300. (Always the Friday following the club meeting.) Moe WBØRTF is now coordinating

the Lunch Bunch!!

Hamfest Horizon

- Jun 1: PPRAA Megafest 2002! Lewis-Palmer High School. Raffle prize: FT-100D, Yaesu VX-1R. Bob Ryals KIØGF, rryals@pcisys.net, 265-9950.
  www.qsl.net/ppraa This is done! Next month we'll announce the winners!
- ➤ Jul 12-14: Rocky Mtn Division Convention, Bryce UT. Kathy Rudnicki N7JSH, , jimkatpa@aol.com, 801-547-9218. www.utahhamfest.org
- ➤ Jul 20: Northern CO ARC Superfest, Larimer County Fairgrounds, Loveland. Doors open 8 am. VE testing, \$4 admission. Tables \$12. FT-817 raffle prize. Rod Cerkoney NØRC, 970-225-0117, n0rc@arrl.net. www.radioactivehams.com/superfest

May 30 – Jun 1, 2003: Rocky Mountain Division Convention (HamCon), Estes Park. Jerry VerDuft ADØA, 719-634-8066, ad0a@arrl.net.

#### IMPORTANT NOTICE!

THE JUNE AND JULY CLUB MEETINGS WILL
BE HELD AT THE
EL PASO COUNTY

OFFICE OF EMERGENCY MANAGEMENT (OEM), 305. S. UNION BLVD.

TURN IN TO THE PARKING LOT ON THE SOUTH SIDE OF THE BUILDING, ENTER THROUGH DOOR AT THE NW CORNER OF THE PARKING LOT.

RACES MEMBERS KNOW THE MEETING ROOM AS THE AUDITORIUM NEAR THE BREAK ROOM IN THE LOWER LEVEL.

THERE WILL BE SIGNS ON THE DOORS!
TALK-IN:

CALL FOR DIRECTIONS ON 146.97 OR 146.58 SIMPLEX.

Pikes Peak Radio Amateur Association, Inc. P.O. Box 16521 Colorado Springs, CO 80935-6521 USA

First Class Mail

To: